SOCS 225 Statistics for the Social Sciences

3 Credits, CRN 61207
W 11.30 a.m. – 2.15 p.m.
NA‘AUAO 103 (SOCIAL SCIENCES LAB)
Back-up Zoom Link (PASSWORD: STATS2022)

Instructor: Lisamarie Bensman, Ph.D.
Email: bensman@hawaii.edu
Office: Na‘auao 114
Office Hours: After class in-person as well as by email and appointment via Google (video chat). Email is an excellent way to get a hold of me; email anytime. I will respond within 24 hours, except on Saturdays.

Effective Date: Spring 2022

WINDWARD COMMUNITY COLLEGE MISSION STATEMENT
Windward Community College offers innovative programs in the arts and sciences and opportunities to gain knowledge and understanding of Hawai‘i and its unique heritage. With a special commitment to support the access and educational needs of Native Hawaiians, we provide O‘ahu’s Ko‘olau region and beyond with liberal arts, career, and lifelong learning in a supportive and challenging environment — inspiring students to excellence.

OUR COURSE
Welcome! Nothing is more essential to understanding and analyzing social science research than a firm grasp of statistical techniques. This class will draw on journal articles, lectures, and practical experience to provide you with a “toolbox” of statistical techniques to help you to approach, answer, and analyze research- in both the social sciences and your everyday life! We will discuss basic statistical premises in an applied research context with a heavy emphasis on practical application and PSPP.

CATALOG DESCRIPTION
This course covers statistical methods related to behavioral sciences including frequency distributions, graphic methods, central tendency, variability, correlation, reliability, and tests of significance. DS (3 hours lecture).

Pre-Requisite(s): Credit in a 100-level (or above) Social Science course, placement into English 100, and placement into Math 103 or higher; or consent of instructor.
Activities Required at Scheduled Times Other than Class Times
For this course, in addition to attending class, you are expected to complete a number of assignments outside of class time, including reading the textbook, homework assignments, studying for quizzes, and a project.

STUDENT LEARNING OUTCOMES
Upon completion of the course, you will be able to:
1. Use descriptive and inferential statistics to summarize and analyze raw data.
2. Present statistical data in graphs and tables.
3. Use statistical formulas to investigate the relationships among variables, including central tendency, correlations, and percentages.
4. Use t-test, f-test, and z-test to test hypotheses and statistical significance.

COURSE TASKS
In addition to our face-to-face lectures, we will use Laulima throughout the semester. Laulima is WCC’s online course management system, which you might have used in previous courses. On Laulima, you will find important class materials (such as our syllabus, class PPs, data sets, and assignment instruction sheets), class announcements, and our gradebook. Access to Laulima requires your regular school username and password.

Required Readings & Materials: This class is very hands-on, but we will still have to do some reading. Our free textbook can be download from: https://irl.umsl.edu/oer/4/

Additionally, we will work extensively with PSPP, a freeware statistical computer program, (https://www.gnu.org/software/pspp/). I highly recommend downloading a copy for your personal computer as you will need to use PSPP for homework. If you don’t have a computer, WCC’s library is loaning laptops for the Spring 2022 semester.
PowerPoints for the course, along with homework assignments, are available on Laulima. Readings are essential to keeping up in this class; without the readings, you will likely be lost during our lectures and hands-on computer work.

**PowerPoint Slides:** Lecture slides are posted on the course website (https://laulima.hawaii.edu/portal). These PowerPoints are to supplement your own note-taking, not replace it. The posted PPs do not contain all the information we cover in class, but they are a great place to start taking your own lecture notes.

**Coursework:** Statistics are a set of skills and tools that you will learn to employ when needed. As such, you are graded based on how well you can use said tools. You have many opportunities to demonstrate your ability to utilize these tools using a variety of different formats:

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
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<tbody>
<tr>
<td>Homework</td>
<td>60 points</td>
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<td>Quizzes</td>
<td>50 points</td>
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<tr>
<td>Statistics Binder</td>
<td>15 points</td>
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<td>Project</td>
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<td><strong>TOTAL</strong></td>
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**Homework:** Our class is very hands on. The best way to learn statistics is to DO THEM. During class we will work with PSPP and you will continue to work with PSPP for your homework assignments. Assignments are each worth 10 points and will be graded on completion, understanding of the material, and accuracy of presentation. Assignments should be typed. Late assignments are not accepted.

A large part of mastering statistics is to keep using them. Almost no one understands statistics the first time through a technique (or even the second or third time). To encourage you to keep practicing, you may revise and re-submit each homework assignment once. Resubmissions are due within one week of the homework being returned; for example, if assignment 1 was returned on Monday, Jan. 10th, your revision would be due by Monday, Jan. 17th. Revisions are optional and can only be submitted if you turned in the original assignment. Assignments will be regraded using the same criteria and your revised grade with be the average of the original grade and the revision; for
example, if the original score on assignment 1 was a 7/10 and the revised assignment 1 was a 10/10, your final score for assignment 1 would be 8.5/10.

**Quizzes:** We have 6 quizzes. Each quiz is worth 10 points and I drop your lowest quiz grade. These quizzes are practical tests of your knowledge and cover basic & applied knowledge of statistical concepts. These quizzes are open-book, open-notes. Similar to the homework assignments, you will use PSPP for the quizzes.

As with the homework, practice makes perfect. With this in mind, you may revise and re-submit each quiz once. Resubmission procedures mirror those used for the homework (resubmissions are due within one week of the quiz being returned and assignments will be regraded using the same criteria and your final grade will be the average of the original grade and the revision).

**Statistics Binder:** Throughout the semester, you will be creating your own stats reference book. All your completed & graded homework, quizzes, class PowerPoints, class notes, and class exercises should be contained in this stats binder. Binders may be either digital or hardcopy (or a combination of part digital, part hardcopy). The binder should be neatly organized by topic. After the semester, this notebook will serve as your very own stats reference book. You will submit your binder towards the end of the semester. It is worth 15 points. After grading, you should retrieve your notebook and (hopefully) use your personalized stats survival guide for future classes.

**Project:** For your final project in this course you will formulate an appropriate research question using approved data, perform descriptive statistics, conduct an appropriate analyses using SPSS, and write up a results section based on your findings in APA style. More information about this project will be handed out later in the semester. It is worth 25 points.

**Late Pass:** While typically, assignments cannot be submitted late, life does sometimes get in the way, so everyone has one late pass for the semester. This late pass can be used to submit an assignment up to 7 days after its due date.

**Attendance Policy:** This is a hybrid class with in-person lecturers, so our goal is to meet in-person each week. However, we will only do this when it is deemed safe. As a class, we will shift to Zoom any time the school requests it. On an individual basis, if you are feeling sick, have been exposed to COVID, have COVID, or are under quarantine, please DO NOT attend in person. Instead attend over Zoom. Here is [our back-up Zoom link](#) (meeting ID: 921 7497 1045, password: Stats2022).

Attendance does not count towards your statistics grade, however homework must be turned in by the day that it is due. If you are absent on that day, you should make alternative arrangements for work to be turned in regardless. The same goes for our quizzes.
COURSE CONTENT

Schedule (tentative and subject to change):

**Topic: Introduction to Our Course and Basic Concepts**  
**Class Date:** 12 January

**Topic: Ways of Describing Data**  
**Class Dates:** 19 January, 26 January, & 2 February  
Read chapters 1, 2, and 3  
Homework #1 is due 28 January  
Quiz #1 is on 2 February

**Topic: Statistical Theory**  
**Class Dates:** 9, 16, & 23 February  
Read chapters 4, 5, and 6  
Homework #2 is due 18 February  
Quiz #2 is on 23 February  
Other: Project planning form & two research articles due 23 February

**Topic: Measures of Association: Cross Tabs, Chi-Square, & Correlations**  
**Class Dates:** 2, 9, & 23 March  
Read chapter 7, 12, and 14  
Homework #3 is due 11 March  
Quiz #3 is on 23 March

**Topic: Regression: Linear & Multiple**  
**PowerPoint:**  
**Class Dates:** 30 March & 6 April  
Read chapter 13  
Homework #4 is due 1 April  
Quiz #4 is on 6 April

**Topic: Hypothesis Testing: t-Tests**  
**Class Dates:** 13 & 20 April  
Read chapters 8, 9, 10  
Homework #5 is due 15 April  
Quiz #5 is on 20 April
Topic: **Hypothesis Testing: ANOVA**  
**Class Dates:** 27 April & 4 May  
Read chapter 11  
Homework #6 is due 29 April  
Quiz #6 is on 4 May  
**Other:** Binder due 4 May  

### Topic: Project Fair  
**Class Date:** 11 May  
**Other:** Project Due  

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Please complete the chapter readings prior to the start of the class period when we begin discussing the topic.  
Homework, quizzes, and the binder are due by 11.59 p.m. on their listed due dates. The project is due during class time on the due date.  

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**ASSESSMENT TASKS AND GRADING**  
You’re spending your valuable time and money on this course, so let’s make sure that you are on course for success. Using this grade tracker sheet, you can always be aware of your grade in our course. Simply fill in your scores as you earn them.  

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<thead>
<tr>
<th>Assignment</th>
<th>Points Earned/Points Possible</th>
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<tbody>
<tr>
<td>Homework #1</td>
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<td>Quiz #1*</td>
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<td>Statistics Notebook</td>
<td>_____/15 points</td>
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<tr>
<td>Project</td>
<td>_____/25 points</td>
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<td><strong>Total</strong></td>
<td>_____/150 points</td>
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* remember to only count your highest 5 quiz grades in your final point total  

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**Grading:**  
Your point total determines the final grade that you earned:  

- **A** = 150.0 – 135 points [percentage of 90 – 100%]  
- **B** = 134.9 – 120 points [percentage of 80 – 89.9%]
C = 119.9 – 105 points [percentage of 70 – 79.9%]
D = 104.9 – 90 points [percentage of 60 – 69.9%]
F = Below 90 points [percentage of 0 – 59.9%]

To figure out your grade at any point during the semester, total up all the points you’ve earned up until thus far and use this formula:

\[(\text{Points earned ÷ Points possible thus far}) \times 100 = \text{Current grade}\]

For example, say it’s mid-semester and you’ve earned 171 points thus far and there have been 200 points available. You would take \(171 \div 200\), which equals .855 and then multiply .855 by 100, which equals 85.5%. Using the above grade breakdown, we’d see that a percentage of 85.5 means that your current grade would be a ‘B’.

**LEARNING RESOURCES**

Our textbook is free and available to download on Laulima.
[https://irl.umsl.edu/oer/4](https://irl.umsl.edu/oer/4)

Additional course materials, including our class PowerPoints, will be available on Laulima.

**Recommended Reading Resources:**

**Campus Resources:**
TRIO: Tutoring and resource center for low-income, first-generation, and/or students with disabilities.

Peer Mentoring: tutoring and mentoring for any student in need of tutoring or educational support (see your campus counselor at Student Services).
The University of Hawai‘i Community Colleges offers free online, on-demand tutoring, through https://windward.hawaii.edu/tutor.com/. Sign in to MyUH.hawaii.edu for access to Tutor.com.

Library Study Services: Our librarians are amazing and can help with oh so much. Please see the librarians for additional details.

EBSCOHost Journal Online DataBase can be accessed through the Library Website: http://library.wcc.hawaii.edu

Student Resources:
Ka Piko is WCC’s academic support hub. Please visit: https://windward.hawaii.edu/kapiko/

Additional Information
I am here to help you succeed in this course. Please don’t hesitate to email me or stop by my office if you have any questions, concerns, or problems. At any point in the semester, if you have concerns about our class that you would prefer not to discuss with me, the Social Sciences department chair, Dr. Christian Palmer (ctpalm@hawaii.edu), is available as a resource. An alternative contact for any concerns is wccaa@hawaii.edu.

In order to keep class fair for everyone, we will adhere strongly to the following course policies:
1. **Plagiarism/Cheating:** I take both plagiarism and cheating very seriously. If I think you have plagiarized (intentionally or unintentionally) or cheated, you will earn a zero for that assignment, no exceptions. A second instance of either will result in failure of the course (i.e. two instances of plagiarism, two instances of cheating or an instance of plagiarism and an instance of cheating).

2. **Late work policy:** Late assignments are not accepted, excepted the usage of the one late pass and in cases of serious documented emergencies with written verification of the extenuating medical, legal, or other qualifying circumstances. The determination of a qualified emergency is made by me; please contact me as soon as you anticipate a problem.

3. **I strongly uphold the University of Hawai‘i’s non-discrimination policy in my class. Any discriminatory acts or language on the basis of race, religion, sex, gender, age, national origin, ancestry, disability, or sexual orientation will NOT be tolerated. We will maintain our online classroom as a safe environment for all.**
DISABILITIES ACCOMMODATION STATEMENT
If you have a physical, sensory, health, cognitive, or mental health disability that could limit your ability to fully participate in this class, you are encouraged to contact the Disability Specialist Counselor to discuss reasonable accommodations that will help you succeed in this class. Roy Inouye can be reached at 235-74, royinouye@hawaii.edu, or you may stop by Hale Kako’o 106 for more information.

TITLE IX
Title IX prohibits discrimination on the basis of sex in education programs and activities that receive federal financial assistance. Specifically, Title IX prohibits sex discrimination; sexual harassment and gender-based harassment, including harassment based on actual or perceived sex, gender, sexual orientation, gender identity, or gender expression; sexual assault; sexual exploitation; domestic violence; dating violence; and stalking. For more information regarding your rights under Title IX, please visit: https://windward.hawaii.edu/Title_IX/.

Windward Community College is committed to the pursuit of equal education. If you or someone you know has experienced sex discrimination or gender-based violence, WCC has resources to support you. To speak with someone confidentially, contact the Mental Health & Wellness Office at 808-235-7393 or Kaahu Alo, Designated Confidential Advocate for Students, at 808-235-7354 or kaahualo@hawaii.edu. To make a formal report, contact the Title IX Coordinator, Karla K. Silva-Park, at 808-235-7468 or karlas@hawaii.edu.

ALTERNATE CONTACT INFORMATION
If you are unable to contact me or experience any issues with class that you’d prefer not to discuss with me, please contact the Academic Affairs Office:

Location: Alakai 121
Phone: 808-235-7422
Email: wccaa@hawaii.edu
If there is any problem, please let us know.